

---

**ENTERGY TEXAS, INC.**  
**2011 ENERGY EFFICIENCY PLAN AND  
REPORT**

**SUBSTANTIVE RULE § 25.181 AND § 25.183**

**APRIL 1, 2011**

---

Project No. 39105



# Table of Contents

<b>INTRODUCTION.....</b>	<b>1</b>
<b>ENERGY EFFICIENCY PLAN AND REPORT (EEPR) ORGANIZATION.....</b>	<b>1</b>
<b>EXECUTIVE SUMMARY .....</b>	<b>3</b>
<b>ENERGY EFFICIENCY PLAN.....</b>	<b>5</b>
<b>I.    2011 Programs.....</b>	<b>5</b>
<b>A.    2011 Program Portfolio .....</b>	<b>5</b>
<b>B.    Existing Programs.....</b>	<b>6</b>
<b>C.    New Programs for 2011 .....</b>	<b>11</b>
<b>II.    Customer Classes .....</b>	<b>12</b>
<b>III.   Projected Energy Efficiency Savings and Goals .....</b>	<b>12</b>
<b>IV.   Program Budgets .....</b>	<b>16</b>
<b>ENERGY EFFICIENCY REPORT .....</b>	<b>18</b>
<b>V.    Historical Demand Savings Goals and Energy Targets for Previous Five           Years.....</b>	<b>18</b>
<b>VI.   Projected, Reported and Verified Demand and Energy Savings .....</b>	<b>19</b>
<b>VII.  Historical Program Expenditures .....</b>	<b>20</b>
<b>VIII. Program Funding for Calendar Year 2010 .....</b>	<b>21</b>
<b>IX.   Market Transformation Program Results.....</b>	<b>21</b>
<b>X.    Current Energy Efficiency Cost Recovery Factor (EECRF).....</b>	<b>26</b>
<b>XI.   Performance Bonus.....</b>	<b>26</b>
<b>ACRONYMS.....</b>	<b>28</b>
<b>GLOSSARY.....</b>	<b>29</b>
<b>APPENDICES .....</b>	<b>33</b>
<b>Appendix A: Reported Demand and Energy Reduction by County 2010.....</b>	<b>A-1</b>
<b>Appendix B: Program Templates.....</b>	<b>B-1</b>
<b>Appendix C: EXISTING Contracts and obligations .....</b>	<b>C-1</b>
<b>Appendix D: Optional Support Documentation .....</b>	<b>D-1</b>

## INTRODUCTION

Entergy Texas, Inc. (“Entergy”) presents this Energy Efficiency Plan and Report (“EEPR”) to comply with Commission Substantive Rules 25.181 and 25.183, which implement Public Utility Regulatory Act (“PURA”) § 39.905. PURA § 39.905 requires that each investor-owned electric utility achieve the following savings goals through market-based standard offer programs (“SOPs”) and limited, targeted, market transformation programs (“MTPs”):

- 20% reduction of the electric utility’s annual growth in demand of residential and commercial customers by December 31, 2011;
- 25% reduction of the electric utility’s annual growth in demand of residential and commercial customers by December 31, 2012.

Substantive Rule 25.181 includes specific requirements related to the implementation of SOPs and MTPs by investor-owned electric utilities that control the manner in which investor-owned electric utilities must administer their portfolio of energy efficiency programs in order to achieve their mandated energy efficiency savings goals. Entergy’s EEPR is intended to enable Entergy to meet its statutory savings goals through implementation of energy efficiency programs in a manner that complies with PURA § 39.905 and Substantive Rule 25.181. This EEPR covers the periods of time outlined in Substantive Rule 25.181. The following section provides a description of what information is contained in each of the subsequent sections and appendices.

## ENERGY EFFICIENCY PLAN AND REPORT (EEPR) ORGANIZATION

This EEPR consists of an executive summary, ten sections and four appendices.

- The Executive Summary highlights Entergy’s reported achievements for 2010 and Entergy’s plans for achieving its 2011 and 2012 energy efficiency goals.

### **Energy Efficiency Plan**

- Section I describes Entergy’s program portfolio. It details how each program will be implemented, discusses related informational and outreach activities, and provides an introduction to any programs not included in Entergy’s previous EEPR.
- Section II explains Entergy’s targeted customer classes, specifying the size of each class and the method for determining those class sizes.
- Section III presents Entergy’s projected energy efficiency savings for the prescribed planning period broken out by program for each customer class.
- Section IV describes Entergy’s proposed energy efficiency budgets for the prescribed planning period broken out by program for each customer class.

## **Energy Efficiency Report**

- Section V documents Entergy's actual weather-adjusted demand savings goals and energy savings targets for the previous five years (2006-2010).
- Section VI compares Entergy's projected energy and demand savings to its reported and verified savings by program for calendar year 2010.
- Section VII details Entergy's incentive and administration expenditures for the previous five years (2006-2010) broken out by program for each customer class.
- Section VIII compares Entergy's actual and budgeted program costs from 2010 broken out by program for each customer class. It also explains any cost increases or decreases of more than 10% for Entergy's overall program budget.
- Section IX describes the results from Entergy's MTPs. It compares existing baselines and existing milestones with actual results, and details any updates to those baselines and milestones.
- Section X documents Entergy's most recent Energy Efficiency Cost Recovery Factor (EECRF).

## **Appendices**

- Appendix A – Reported kW and kWh savings broken out by county for each program.
- Appendix B – Program templates for any new or newly-modified programs not included in Entergy's previous EEPR.
- Appendix C – Description of Entergy's existing energy efficiency contracts and obligations.
- Appendix D – Additional data, explanations, and documentation supporting other sections of this EEPR.

## EXECUTIVE SUMMARY

The Energy Efficiency Plan portion of this EEPR details Entergy's plans to achieve a 20% reduction in its annual growth in demand of residential and commercial customers by December 31, 2011 and a 25% reduction in its annual growth in demand of residential and commercial customers by December 31, 2012. In the process, Entergy will also address the corresponding energy savings goal, which is calculated from its demand savings goal using a 20% capacity factor. The goals, budgets and implementation plans that are included in this EEPR are highly influenced by the requirements of Substantive Rule 25.181 and lessons learned regarding energy efficiency service provider and customer participation in the various energy efficiency programs. A summary of annual goals and budgets is presented in Table 1.

The Energy Efficiency Report portion of this EEPR demonstrates that in 2010 Entergy successfully implemented energy efficiency programs sufficient to meet Entergy's 20% energy efficiency savings goal by procuring 13,243 kW in demand savings and 28,629,452 kWh in energy savings. These programs included the Residential Standard Offer Program ("Residential SOP"), the Commercial Solutions Market Transformation Program ("Commercial Solutions MTP"), the Schools Concerned with Reducing Energy and CitySmart Market Transformation Program ("Texas SCORE/CitySmart MTP"), the Load Management Standard Offer Program ("Load Management SOP"), the Hard-to-Reach Standard Offer Program ("Hard-to-Reach SOP"), the Premium Lighting Market Transformation Program ("Premium Lighting MTP"), and the Energy Star® Homes Market Transformation Program ("Energy Star® MTP"). In addition, Entergy also started a new pilot program in 2010, the Solar Photovoltaic Pilot Market Transformation Program ("Solar PV Pilot MTP").

**Table 1: Summary of Goals, Projected Savings, and Projected Budgets (at Meter) <sup>1</sup>**

<b>Calendar Year</b>	<b>Average Growth in Demand (MW)</b>	<b>MW Goal (% of Growth in Demand)</b>	<b>Demand (MW) Goal</b>	<b>Energy (GWh) Goal<sup>2</sup></b>	<b>Projected MW Savings<sup>3</sup></b>	<b>Projected GWh Savings<sup>2,3</sup></b>	<b>Projected Budget (000's)</b>
<b>2011</b>	62	20 %	12.4	21.7	12.4	21.7	\$7,456
<b>2012</b>	62	25%	15.5	33.9	15.5	33.9	\$11,184

In order to reach the above projected savings, Entergy will implement the following SOPs and MTPs in 2011:

- Residential SOP
- Hard-to-Reach SOP
- Load Management SOP
- Energy Star<sup>®</sup> MTP
- Texas SCORE/CitySmart MTP
- Commercial Solutions MTP
- Solar Photovoltaic Market Transformation Program (“Solar PV MTP”)
- Home Performance with Energy Star<sup>®</sup> Market Transformation Program (“Home Performance with Energy Star<sup>®</sup> MTP”)

---

<sup>1</sup> Average Growth in Demand figures are from Table 4; Projected Savings are from Table 5; Projected Budget is from Table 6. All kW/MW and kWh/MWh/GWh figures in this Table and throughout this EEPR are given “at Meter.”

<sup>2</sup> Calculated using a 20% capacity factor.

<sup>3</sup> These numbers reflect peak demand reduction and energy savings for the current and following calendar year that Entergy is planning and budgeting for in the EEPR.

# ENERGY EFFICIENCY PLAN

## I. 2011 Programs

### A. 2011 Program Portfolio

Entergy plans to implement five MTPs and three SOPs, including four pilot programs, in 2011: the Texas SCORE/CitySmart MTP, the Commercial Solutions MTP, the Load Management SOP, the Solar PV MTP, the Residential SOP, the Hard-to-Reach SOP, the Energy Star® MTP, and the Home Performance with Energy Star® MTP, which is the newest program offering in Entergy’s program inventory. These programs have been structured to comply with the Commission’s recent amendments to Substantive Rule 25.181 regarding program design and evaluation.<sup>4</sup>

These programs target both broad market segments and specific market sub-segments that offer significant opportunities for cost-effective savings. Entergy anticipates that targeted outreach to a broad range of service provider types will be necessary in order to meet the savings goals required by PURA § 39.905 on a continuing basis. Table 2 below summarizes the programs and target markets.

**Table 2: 2010 Energy Efficiency Program Portfolio**

Program	Target Market	Application
Residential SOP	Residential	Retrofit
Commercial SOP	Commercial	New Construction, Retrofit
Hard-to-Reach SOP	Hard-to-Reach Residential	Retrofit
Load Management SOP	Large Commercial	Retrofit
Energy Star® Homes MTP	Residential	New Construction
Solar PV MTP	Residential/Commercial	New Construction/Retrofit
Texas SCORE/CitySmart MTP	Large Commercial (K-12 schools); Municipality and County Entities	New Construction, Retrofit
Home Performance with Energy Star® MTP	Residential	Retrofit

<sup>4</sup> *Rulemaking Proceeding to Amend Energy Efficiency Rules*, Project No. 37623 (Aug. 9, 2010).

The programs listed in Table 2 are described in further detail below. Entergy maintains a website containing all of the requirements for project participation, the forms required for project submission, and the current available funding at [www.ENERGYefficiency.com](http://www.ENERGYefficiency.com). The website is the primary method of communication used to provide potential project sponsors with program updates and information.

## ***B. Existing***

### **Residential SOP**

#### ***Program Design***

The Residential SOP for 2011 targets only residential customers, whereas in the past small commercial customers were also included in the program. Incentives are paid to project sponsors for certain eligible measures installed in retrofit applications that result in verifiable demand and energy savings. Deemed savings are accepted and widely used by project sponsors as measurable and verifiable savings for projects submitted in this program.

#### ***Implementation Process***

Entergy will continue implementation of its Residential SOP whereby any eligible project sponsor may submit an application for a project meeting the minimum requirements. The program information on Entergy's website is updated frequently to reflect participating Project Sponsors and incentive amounts that are available.

#### ***Outreach activities***

Entergy markets the availability of its programs in the following manner:

- utilizes mass electronic mail (e-mail) notifications to keep potential project sponsors interested and informed;
- maintains a website with detailed project eligibility, end-use measures, incentives, procedures and application forms;
- attends appropriate industry-related meetings to generate awareness and interest;
- conducts workshops as necessary to explain elements such as responsibilities of the project sponsor, project requirements, incentive information, and the application and reporting process.



## **Hard-to-Reach SOP**

### ***Program design***

The Hard-to-Reach SOP targets low-income customers with incomes at or below 200% of the federal poverty level. Incentives are paid to project sponsors for certain measures installed in retrofit applications that provide verifiable demand and energy savings.

### ***Implementation process***

Entergy will continue implementation of its Hard-to-Reach SOP whereby any eligible project sponsor may submit an application for a project meeting the minimum requirements. The program information on Entergy's website is updated frequently to reflect participating project sponsors and incentive amounts that are available.

### ***Outreach activities***

Entergy markets the availability of its programs in the following manner:

- utilizes mass electronic mail (e-mail) notifications to keep potential project sponsors interested and informed;
- maintains a website with detailed project eligibility, end-use measures, incentives, procedures and application forms;
- attends appropriate industry-related meetings to generate awareness and interest;
- conducts workshops as necessary to explain elements such as responsibilities of the project sponsor, project requirements, incentive information, and the application and reporting process.

## **Commercial Solutions MTP**

### ***Program design***

The Commercial Solutions MTP targets commercial customers. Incentives are paid to project sponsors for certain measures installed in new or retrofit applications that provide verifiable demand and energy savings.

### ***Implementation process***

Entergy will continue implementation of its Commercial Solutions MTP whereby any eligible project sponsor may submit an application for a project meeting the minimum requirements. The program information on Entergy's website is updated frequently to reflect participating Project Sponsors and incentive amounts that are available.

### ***Outreach activities***

Entergy markets the availability of its programs in the following manner:

- utilizes mass electronic mail (e-mail) notifications to keep potential project sponsors interested and informed;
- maintains a website with detailed project eligibility, end-use measures, incentives, procedures and application forms;
- attends appropriate industry-related meetings to generate awareness and interest;
- participates in state-wide outreach activities as may be available;
- conducts workshops as necessary to explain elements such as responsibilities of the project sponsor, project requirements, incentive information, and the application and reporting process.

## **Energy Star® Homes MTP**

### ***Program design***

The Energy Star® MTP targets builders in residential new construction that build to the Environmental Protection Agency's Energy Star® standards, which is 15% above the state building code. Incentives are paid to builders for installing certain new construction applications that provide verifiable demand and energy savings.

### ***Implementation process***

Entergy will continue implementation of its Energy Star® MTP whereby any eligible builder may submit an application for a home meeting the requirements. The program information on Entergy's website is updated frequently to reflect participating builders and incentive amounts that are available.

### ***Outreach activities***

Entergy markets the availability of its programs in the following manner:

- utilizes mass electronic mail (e-mail) notifications to keep potential builders interested and informed;
- maintains internet website with detailed builder eligibility, end-use measures, incentives, procedures and application forms;
- attends appropriate industry-related meetings to generate awareness and interest;
- participates in state-wide outreach activities as may be available;
- conducts workshops as necessary to explain elements such as responsibilities of the project sponsor, project requirements, incentive information, and the application and reporting process.

## **Texas SCORE/CitySmart MTP**

Consistent with SB712, which was passed by the Texas Legislature in 2005, and the Pilot Program Template adopted by the Public Utility Commission of Texas (“PUCT”) in November 2005, Entergy offers school districts and local governments in its service territory the Texas SCORE/CitySmart MTP. Entergy recognizes that public school districts in Texas are experiencing the burden of high energy costs now more than ever. While energy costs have historically accounted for only about 3% of Texas school districts’ total budgets, those costs have soared into the 5% to 6% range in the last few years. The same is true for city and county buildings. Further, a majority of school districts and city and county governments lack the technical knowledge, first-hand experience, and management decision-making processes that are necessary for identifying, prioritizing, and completing projects that will improve their schools’ energy performance and reduce operating costs. Cash incentives as well as technical expertise are offered to participating customers who install eligible measures in either a new or retrofit project.

### ***Implementation Process***

With this program, Entergy targets public school districts and local, state, and federal governments. The program facilitates the identification of potential demand and energy savings opportunities, general operating characteristics, long-range energy efficiency planning, and overall measure and program acceptance by the targeted customer participants. Also, in order to better understand the market characteristics of this customer sect and to improve its program offering to better meet this need, Entergy partnered with several other utilities to fund a “Texas School and Local Government Energy Efficiency Market Assessment and Baseline Study.” The executive summary of the study is presented in Appendix D.

### ***Outreach Activities***

Entergy markets the availability of the program in the following manner:

- contracts with a third-party to implement outreach and planning activities;
- targets a number of customer participants;
- conducts workshops to explain virtues of the program and necessary information to begin or continue participation;
- participates in regional or area outreach; and
- attends appropriate industry-related meetings to generate awareness and interest.

## **Load Management SOP**

### ***Program design***

Entergy will implement the Load Management SOP pursuant to the PUCT's approved template. The Load Management SOP will provide demand reduction solutions to a select group of customers during the calendar year 2011. Incentives will be paid to customers for certain measures installed in retrofit applications that provide verifiable demand savings.

### ***Implementation process***

Under the program, Entergy will initially target several select customers for participation in the Load Management SOP. This program will facilitate the examination of actual demand savings, operating characteristics, program design, long-range planning, and overall measures and program acceptance by the targeted customers.

### ***Outreach activities***

Entergy will target the availability of its programs in the following manner:

- contracts with a third-party project sponsor to implement outreach activities;
- targets several large commercial customers during the program;
- conducts workshops to explain elements such as responsibilities of the customers, project requirements, incentive information, and the application and reporting process.

## **Solar PV MTP**

### ***Program design***

The Solar PV Pilot MTP that was implemented in 2010 is being continued in 2011 as a full MTP. The program targets those customers, both residential and commercial, who are interested in reducing their energy costs by installing a solar alternative as a renewable energy source. The Solar PV MTP calls for education, training, and incentives to attract customers to this renewable resource.

### ***Implementation process***

Entergy has contracted with Frontier Associates LLC ("Frontier Associates") and Clean Energy Associates to design and implement a successful solar program by offering:

- education for potential customers and project sponsors on the use of solar technologies to reduce energy consumption;
- training for project sponsors on proper applications, installation, marketing, and verification of savings from solar equipment.

### ***Outreach activities***

Entergy will target the availability of its programs to solar advocates from all over the state in the following manner:

- Workshops held in various locations
- Partnerships with educational institutions
- Partnerships with state agencies
- Program details on Entergy's energy efficiency website

### ***C. New Programs for 2011***

#### **Home Performance with Energy Star® MTP**

##### ***Program design***

The new Home Performance with Energy Star® MTP will target residential customers in existing homes that are interested in bringing their homes up to the Energy Star® standards. The program calls for certified Home Energy Rating Service providers to provide the customer with an analysis of their home and make recommendations to bring it up to Energy Star® standards. The program calls for extensive outreach, training, education, and incentives to attract customers, certified Home Energy Rating Service companies, and qualified contractors to the program.

##### ***Implementation process***

Entergy has contracted with ICF International to implement the program. ICF International's success in implementing this program in the Oncor Electric Delivery Company LLC ("Oncor") markets made the program especially attractive to Entergy. Some of the contractors in Oncor's program have indicated a willingness to come into Entergy's territory to participate in the program. Additionally, Entergy will implement an extensive outreach program and training to attract local contractors into the program. Entergy will generate public awareness of the program through educational seminars, local and regional promotions by Entergy, and promotions by participating contractors and Home Energy Rating service providers.

##### ***Outreach and Research activities***

Entergy will target the availability of its programs in the following manner:

- Contractor Workshops
- Educational seminars for customers
- Local and regional promotions by Entergy
- Contractor Promotions

## II. Customer Classes

The customer classes targeted by Entergy’s energy efficiency programs are the Commercial, Residential, and Hard-to-Reach customer classes.

The annual demand goal will be allocated to customer classes by examining historical program results, evaluating economic trends, and taking into account the requirements of Substantive Rule 25.181, which states that no less than 5% of the utility’s total demand goal should be achieved through programs for hard-to-reach customers.

Table 3 below summarizes the number of customers in each of the customer classes, which was used to determine budget allocations for those classes.

It should be noted, however, that the actual distribution of the goal and budget must remain flexible based upon the response of the marketplace, the potential interest that a customer class may have toward a specific program and the overriding objective of meeting the legislative goal. Entergy offers a portfolio of SOPs and MTPs that will be available to all customer classes.

**Table 3: Summary of Customer Classes**

Customer Class	Number of Customers
Commercial	44,221
Residential	357,433
Hard-to-Reach <sup>5</sup>	116,166

## III. Projected Energy Efficiency Savings and Goals

As prescribed by Substantive Rule 25.181, Entergy’s demand goal is specified as a percentage of its historical five-year average growth in demand. As an example, the December 31, 2011 goal is based on the average annual growth in peak demand from 2006 to 2010. The demand goal for 2011 is based on meeting 20% of the electric utility’s annual growth in demand of residential and commercial customers by December 31, 2011. The demand goal for 2012 is based on meeting 25% of the electric utility’s annual growth in demand of residential and commercial customers by December 31, 2012. The corresponding energy savings goals are determined by applying a 20% capacity factor to the applicable demand goals.

Table 4 presents historical annual growth in demand for the previous five years that is used to calculate demand and energy goals. Although demand has been down for the last few years due to Hurricane Ike and a poor economy, 2010 proved to be an exceptional year for retail sales.

---

<sup>5</sup> According to the U.S. Census Bureau’s 2007 Current Population Survey, 32.5% of Texas families fall below 200% of the poverty threshold. Applying that percentage to Entergy’s residential customer base of 352,682, the number of hard-to-reach customers is estimated to be 116,166.

Original forecasts showed demand stagnant or even showing negative growth, as is shown in Table 1 of Entergy's 2010 EEPR filed in Project No. 37982. However, the actual peak demand grew by a robust 11.9% in 2010 as shown in Table 4, below. Table 5 presents the projected demand and energy savings broken out by program for each customer class for 2011 and 2012. Projected savings reflect Entergy's calculated goals and Entergy's continued commitment to emphasize the needs of its low-income customers.

**Table 4: Annual Growth in Demand and Energy Consumption (at Meter)**

Calendar Year	Peak Demand (MW)				Energy Consumption (MWh)				Growth (MW)	Average Growth (MW) <sup>6</sup>
	Total System		Residential & Commercial		Total System		Residential & Commercial			
	Actual	Actual Weather Adjusted	Actual	Actual Weather Adjusted	Actual	Actual Weather Adjusted	Actual	Actual Weather Adjusted	Actual Weather Adjusted	Actual Weather Adjusted
<b>2006</b>	3,112	3,160	2,530	2,572	15,383,259	15,359,498	9,451,106	9,444,649	181	NA
<b>2007</b>	3,269	3,183	2,663	2,587	15,522,096	15,457,959	9,454,931	9,546,936	15	NA
<b>2008</b>	3,192	3,224	2,567	2,617	15,625,211	15,767,996	9,688,365	9,758,758	30	NA
<b>2009</b>	3247	3160	2534	2414	15,377,357	15,412,215	9,577,555	9,540,902	-203	NA
<b>2010</b>	3621	3716	2642	2704	15,865,236	15,905,412	10,115,569	10,233,463	287	NA
<b>2011</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	12.4
<b>2012</b>	NA	NA	NA	NA	NA	NA	NA	NA	NA	15.5

“NA” = Not Applicable. Average growth figures from 2006-2010 are not applicable to any of the calculations or goals in this EEPR. Energy efficiency goals are calculated based upon the actual historical weather-adjusted growth in demand for the five most recent years, so peak demand and energy consumption forecasts for 2011 and 2012 are not applicable.

<sup>6</sup> Average historical growth in demand over the previous five years for residential and commercial customers adjusted for weather fluctuations.



**Table 5: Projected Demand and Energy Savings Broken Out by Program for Each Customer Class (at Meter)**

<b>2011</b>	<b>Projected Savings</b>	
<b>Customer Class and Program</b>	<b>kW</b>	<b>kWh</b>
<b>Commercial</b>	<b>6,200</b>	<b>11,774,800</b>
Commercial Solutions MTP	1,300	6,200,800
Load Management SOP	3000	0
Texas SCORE/CitySmart MTP	1900	5,574,000
<b>Residential</b>	<b>4,600</b>	<b>6,250,000</b>
Residential SOP	2,210	4,200,000
Energy Star® Homes MTP	2,000	1,600,000
Solar PV MTP	95	150,000
Home Performance with Energy Star® MTP	95	300,000
<b>Hard-to-Reach</b>	<b>1,800</b>	<b>3,700,000</b>
Hard-to-Reach SOP	1,800	3,700,000
<b>Total Annual Savings Goals</b>	<b>12,400</b>	<b>21,724,800</b>
<b>2012</b>	<b>Projected Savings</b>	
<b>Customer Class and Program</b>	<b>kW</b>	<b>kWh</b>
<b>Commercial</b>	<b>7,000</b>	<b>13,483,000</b>
Commercial Solutions MTP	2000	7,823,000
Load Management SOP	3000	0
Texas SCORE/CitySmart MTP	2000	7,823,000
<b>Residential</b>	<b>5,800</b>	<b>8,609,000</b>
Residential SOP	3,280	6,498,000
Energy Star® Homes MTP	2,000	1,546,000
Solar PV MTP	100	155,000
Home Performance with Energy Star® MTP	120	400,000
<b>Hard-to-Reach</b>	<b>2,700</b>	<b>5,064,000</b>
Hard-to-Reach SOP	2,700	5,064,000
<b>Total Annual Savings Goals</b>	<b>15,500</b>	<b>27,156,000</b>

## **IV. Program Budgets**

Table 6 below presents total proposed budget allocations required to achieve the projected demand and energy savings shown in Table 5. The budget for the Commercial class includes costs for SOPs as well as costs for existing demand-side management (“DSM”) contracts. The budget allocations are defined by the overall projected demand and energy savings, the avoided costs of capacity and energy provided under Substantive Rule 25.181, the allocation of demand goals among customer classes, the incentive levels by customer class, and the projected costs for existing DSM contracts. The budget allocations presented in Table 6 are broken down by customer class, program, and the following budget categories: incentive payments, administration, and research and development (“R&D”). Entergy added an additional budgeting “class” for R&D to account for R&D expenditures that are not affiliated with a specific customer class or program.

**Table 6: Proposed Annual Budget Broken Out by Program for Each Customer Class (000's)**

<b>2011</b>	<b>Incentives</b>	<b>Admin</b>	<b>R&amp;D</b>	<b>Total Budget</b>
<b>Commercial</b>	<b>\$2,445</b>	<b>\$247</b>	<b>\$0</b>	<b>\$2,692</b>
Commercial Solutions MTP	\$1,100	\$110	\$0	\$1,210
Load Management SOP	\$225	\$25	\$0	\$250
Texas SCORE/CitySmart MTP	\$1,120	\$112	\$0	\$1,232
<b>Residential</b>	<b>\$2,890</b>	<b>\$252</b>	<b>\$0</b>	<b>\$3,142</b>
Residential SOP	\$1,500	\$150	\$0	\$1,650
Energy Star® Homes MTP	\$500	\$50	\$0	\$550
Solar PV MTP	\$450	\$40	\$0	\$490
Home Performance with Energy Star® MTP	\$440	\$12	\$0	\$452
<b>Hard-to-Reach</b>	<b>\$1,479</b>	<b>\$143</b>	<b>\$0</b>	<b>\$1,622</b>
Hard-to-Reach SOP	\$1,479	\$143	\$0	\$1,622
<b>Total Budgets by Category</b>	<b>\$6,814</b>	<b>\$642</b>	<b>\$0</b>	<b>\$7,456</b>
<b>2012</b>	<b>Incentives</b>	<b>Admin</b>	<b>R&amp;D</b>	<b>Total Budget</b>
<b>Commercial</b>	<b>\$3,300</b>	<b>\$404</b>	<b>\$0</b>	<b>\$3,704</b>
Commercial Solutions MTP	\$1,500	\$184	\$0	\$1,684
Load Management SOP	\$300	\$45	\$0	\$345
Texas SCORE/CitySmart MTP	\$1,500	\$175	\$0	\$1,675
<b>Residential</b>	<b>\$3,750</b>	<b>\$390</b>	<b>\$0</b>	<b>\$4,140</b>
Residential SOP	\$2,300	\$230	\$0	\$2,530
Energy Star® Homes MTP	\$600	\$65	\$0	\$665
Solar PV MTP	\$450	\$50	\$0	\$500
Home Performance with Energy Star® MTP	\$400	\$45	\$0	\$445
<b>Hard-to-Reach</b>	<b>\$2,700</b>	<b>\$200</b>	<b>\$0</b>	<b>\$2,900</b>
Hard-to-Reach SOP	\$2,700	\$200	\$0	\$2,900
<b>Total Budgets by Category</b>	<b>\$10,150</b>	<b>1,034</b>	<b>\$0</b>	<b>\$10,744</b>

# ENERGY EFFICIENCY REPORT

## V. Historical Demand Savings Goals and Energy Targets for Previous Five Years

Table 7 documents Entergy's actual demand goals and energy targets for the previous five years (2006-2010) calculated in accordance with Substantive Rule 25.181.

**Table 7: Historical Demand Savings Goals and Energy Targets (at Meter)**

<b>Calendar Year<sup>7</sup></b>	<b>Actual Weather Adjusted Demand Goal (MW)</b>	<b>Actual Weather Adjusted Energy Targets (MWh)</b>
<b>2010</b>	10.6 <sup>8</sup>	18,571 <sup>9</sup>
<b>2009</b>	10.6	18,571
<b>2008</b>	4.5	7,936
<b>2007</b>	3.744	6,552
<b>2006</b>	4.89	8,567

---

<sup>7</sup> The 2010 budget was taken from Table 10; the 2009 budget was taken from Table 10 in Entergy's 2010 EEPR filed in Project 37982; the 2008 budget was taken from Entergy's 2009 EEPR filed in Project No. 36689; the 2007 budget was taken from Entergy Gulf States, Inc.'s ("EGSI") 2007 Energy Efficiency Plan, filed in Project No. 33884; the 2006 budget was taken from EGSI's 2006 Energy Efficiency Report filed in Project No. 33884.

<sup>8</sup> Entergy actually had average negative growth in 2010. Per Table 4, Entergy had 287 MW of growth, but the average growth over 5 years was -5.58 MW. However, in order to comply with Substantive Rule 25.181(e)(1)(D), which states that "beginning in 2009, a utility's demand reduction goal in megawatts for any year shall not be less than the previous year's goal," Entergy used its projected demand and energy goals as its actual goals for 2010.

<sup>9</sup> *Id.*

## VI. Projected, Reported and Verified Demand and Energy Savings

Table 8: Projected versus Reported and Verified Savings for 2009 and 2010 (at Meter)

<b>2010</b>	<b>Projected Savings</b>		<b>Reported and Verified Savings</b>	
<b>Customer Class and Program</b>	<b>MW</b>	<b>MWh (000's)</b>	<b>MW</b>	<b>MWh (000's)</b>
<b>Commercial</b>	<b>4.2</b>	<b>7,183</b>	<b>7.384</b>	<b>14,350</b>
Commercial Solutions MTP	1.1	3,448	1.6	7,100
Load Management SOP	1.9		2.74	
Texas SCORE/CitySmart MTP	1.2	3735	3.044	7,249
<b>Residential</b>	<b>5.09</b>	<b>8,916</b>	<b>4.4</b>	<b>9,475</b>
Residential SOP	2.7	4,729	2.05	4,555
Energy Star® Homes MTP	2.0	3,504	1.9	1,464
Solar PV Pilot MTP	.09	.101	.152	277
Premium Lighting MTP	.30	582	.451	7,231
<b>Hard-to-Reach</b>	<b>1.3</b>	<b>2472</b>	<b>1312</b>	<b>3,472</b>
Hard-to-Reach SOP	1.31	2,472	1312	3,472
<b>Total Annual Savings Goals</b>	<b>10.6</b>	<b>18,571</b>	<b>13.243</b>	<b>28,630</b>
<b>2009</b>	<b>Projected Savings</b>		<b>Reported and Verified Savings</b>	
<b>Customer Class and Program</b>	<b>MW</b>	<b>MWh</b>	<b>MW</b>	<b>MWh</b>
<b>Commercial</b>	<b>4.1</b>	<b>7,183</b>	<b>5.76</b>	<b>12,126</b>
Commercial Solutions MTP	1.1	3,448	1.45	6,808
Load Management SOP	1.8	0	1.81	0
Texas SCORE/CitySmart MTP	1.2	3,735	2.5	5,318
<b>Residential</b>	<b>5.1</b>	<b>8,935</b>	<b>5.49</b>	<b>15,689</b>
Residential & Small Commercial SOP	2.6	4,555	3.6	9,100
Energy Star® Homes MTP	2.11	3,697	1.36	1,189
Statewide CFL Lighting MTP	0.09	101	0.04	531
<b>Hard-to-Reach</b>	<b>1.40</b>	<b>2,453</b>	<b>2.35</b>	<b>6,656</b>
Hard-to-Reach SOP	1.10	1,927	2.26	6,426
Energy Assist	0.3	526	.09	230
<b>Total Annual Savings Goals</b>	<b>10.6</b>	<b>18,571</b>	<b>13.66</b>	<b>33,970</b>

## VII. Historical Program Expenditures

This section documents Entergy's incentive and administration expenditures for the previous five years (2006-2010) broken out by program for each customer class.

**Table 9: Historical Program Incentive and Administrative Expenditures for 2006 through 2010 (000's)<sup>10</sup>**

2006 through 2010 <sup>10</sup>	2010		2009		2008		2007		2006	
	Incent.	Admin	Incent.	Admin	Incent.	Admin	Incent.	Admin	Incent.	Admin
<b>Commercial</b>	<b>2,345</b>	<b>240</b>	<b>2012</b>	<b>118</b>	<b>470</b>	<b>64</b>	<b>447</b>	<b>23</b>	<b>638</b>	<b>71</b>
Large Commercial SOP	1,093	95	1079	68	93	16	447	23	638	71
Load Management SOP	134	53	85	10	47	12	NA	NA	NA	NA
Texas SCORE/CitySmart MTP	1,118	92	848	40	330	36	NA	NA	NA	NA
<b>Residential</b>	<b>2,661</b>	<b>286</b>	<b>2624</b>	<b>85</b>	<b>952</b>	<b>104</b>	<b>720</b>	<b>63</b>	<b>625</b>	<b>70</b>
Residential & Small Commercial SOP	1,439	100	1694	40	448	49	428	26	323	36
Energy Star® Homes MTP	431	78	457	25	256	27	292	37	302	34
Solar PV Pilot MTP	454	72	93	10	NA	NA	NA	NA	NA	NA
Statewide (Premium Lighting) CFL Pilot MTP	337	36	380	10	248	28	NA	NA	NA	NA
<b>Hard-to-Reach</b>	<b>1,401</b>	<b>99</b>	<b>2947</b>	<b>84</b>	<b>1,164</b>	<b>84</b>	<b>1,711</b>	<b>96</b>	<b>1,979</b>	<b>90</b>
Hard-to-Reach SOP	1,401	99	2072	79	823	50	835	21	810	90
Low Income Weatherization SOP	NA	NA	875	5	341	34	876	75	1,169	0
<b>Total Expenditures</b>	<b>6407</b>	<b>625</b>	<b>7583</b>	<b>287</b>	<b>2586</b>	<b>252</b>	<b>2,786</b>	<b>182</b>	<b>3,242</b>	<b>231</b>

<sup>10</sup> See supra, note 7.

## VIII. Program Funding for Calendar Year 2010

As shown in

Table 10, Entergy spent a total of \$7.032 million on all of its energy efficiency programs in 2010. The total forecasted budget for 2010 was \$7.456 million.

**Table 10: Program Funding for Calendar Year 2010 (Dollar amounts in 000's)**

<b>2010</b>	<b>Total Projected Budget</b>	<b>Numbers of Customers Participating</b>	<b>Actual Funds Expended (Incentives)</b>	<b>Actual Funds Expended (Admin)</b>	<b>Total Funds Expended</b>	<b>Funds Committed (Not Expended)</b>	<b>Funds Remaining (Not Committed)</b>
<b>Commercial</b>	<b>2,659</b>	<b>73</b>	<b>2,345</b>	<b>240</b>	<b>2,585</b>	<b>(74)</b>	<b>0</b>
Commercial Solutions MTP	1,165	40	1,093	95	1,188	23	0
Load Management MTP	229	5	134	53	187	(42)	0
Texas SCORE/CitySmart MTP	1,265	28	1,118	92	1,210	(55)	0
<b>Residential</b>	<b>3,104</b>	<b>10,413</b>	<b>2,661</b>	<b>286</b>	<b>2,947</b>	<b>(157)</b>	<b>0</b>
Residential SOP	1,714	2293	1,439	100	1,539	(175)	0
Energy Star® Homes MTP	500	867	431	78	509	(9)	0
Solar PV Pilot MTP	450	22	454	72	526	76	0
Premium Lighting MTP	440	7,231	337	36	373	67	0
<b>Hard-to-Reach</b>	<b>1,693</b>	<b>2,559</b>	<b>1,401</b>	<b>99</b>	<b>1,500</b>	<b>(193)</b>	<b>0</b>
Hard-to-Reach SOP	1,693	2,559	1,401	99	1,500	(193)	0
<b>Total Expenditures</b>	<b>7,456</b>	<b>13,045</b>	<b>6407</b>	<b>625</b>	<b>7,032</b>	<b>424</b>	<b>0</b>

## IX. Market Transformation Program Results

### Energy Star® MTP Program

The primary objective of this program is to achieve peak demand reductions and/or energy savings through increased sales of Energy Star® homes and products. Additionally, the program is designed to condition the market so that consumers are aware of and demand Energy Star® homes and products, and builders have the technical capacity to supply them. A baseline study was conducted in the first quarter of 2007 to determine the existing level of efficiency typical of new

home construction in Entergy's service territory. The study, which included homes that were built by builders participating in Entergy's 2007 Energy Star® Homes Program but that were not actually included in the program, showed the average Home Energy Rating System ("HERS") Index for homes not in the program to be 91. This compares to a minimum qualifying Energy Star® Index of 85.

The economic recession had a major impact on the Energy Star® Homes Program in 2010. Builders had trouble securing lines of credit to build additional homes and customers had trouble getting mortgages. The result was that a similar number of homes were certified in 2010 as were certified in 2009, despite a newly enacted and aggressive marketing campaign to attract new builders. However, without this marketing push, 2010 would have been disastrous in residential new construction. Entergy was able to attract 26 builders into the program and had 867 homes completed under the program. The savings attributable to the program was 1.9 MW and 1.5 gWh. ICF International has been retained to implement the program in 2011.

### **Commercial Solutions MTP**

The primary objective of changing the program from an SOP, as it was implemented in the past, to an MTP was to devote more resources, primarily for additional man-power, to the program. Entergy was experiencing dramatic dropout numbers from project sponsors who grabbed up the SOP offerings but failed to either start or complete their projects before their milestone dates, causing them to lose project funding. In addition, Hurricane Ike took a terrible toll on Entergy's service territory, causing most energy efficiency projects to be put on hold until more urgent repairs could be made to repair the system and get customers back on-line. Entergy hired CLEAResult Consulting ("CLEAResult") to implement the Commercial Solutions MTP. CLEAResult was able to devote the necessary resources to recruit new customers to the program and manage the various projects. In addition, CLEAResult was able to provide a significant amount of technical expertise to customers who were unsure of some of the new technologies, especially in lighting and HVAC. Many smaller commercial customers using less than 150 kW of demand usage started to participate in the program. As a result, 40 different commercial customers participated in the program and achieved 1.6 MW of demand savings and 7.1 gWh of energy savings.

### **Texas SCORE/CitySmart MTP**

In 2010, Entergy had great success with the Texas SCORE/CitySmart MTP. School districts and governmental entities targeted by the program had great success in reducing their demand and energy consumption. Program participants are touting the value of the program and recommending participation to others. In 2010, Entergy saved 3.0 MW and 7.2 gWh through the program. Many projects that were not scheduled to be implemented for several years are now being expedited on account of the program. As such, the program is expected to be very successful for several years to come.



## Premium Lighting MTP

In 2010, Entergy administered a Premium Lighting MTP. This program, implemented by Ecos IQ Consulting (“Ecos”), encouraged customers to purchase higher efficiency compact fluorescent light bulbs (CFLs) (< 14 watts) and LED bulbs, instead of incandescent light bulbs, by lowering prices and increasing the availability of CFLs at stores within the service area through upstream markdowns and buy-downs. Markdowns and buy-downs consist of providing payments to lighting manufacturers to provide products to retailers at lower prices, sometimes allowing retailers to carry products they had not carried previously. The program also involved placing point-of-purchase marketing materials in participating stores that inform consumers about CFLs and encourage their purchase.

In 2010, the program facilitated customer purchases of over 200,000 discounted CFLs in Entergy’s territory. This translated to annual savings of .451 MW and 7.2 gWh. This included sales at at least four independent retail stores that had not participated in the program in 2009. The program also oversaw retailer training sessions, in-store and community outreach events, and the distribution of 5,500 free CFLs to customers served by Entergy.

Frontier Associates was contracted to perform measurement and verification for the program. Frontier Associates estimated the free-ridership and leakage associated with the program to affirm its cost-effectiveness under the Commission’s rules.

Ecos obtained detailed information from lighting manufacturers about the bulbs that were discounted through the program. For each store participating in the program, the number of discounted bulbs sold at the store was recorded by stock keeping unit (“SKU”). This information was the starting point for Frontier Associates’ analysis.

Leakage from the program is defined in this case as the sale of discounted CFLs and LEDs to consumers that do not receive service from Entergy. The leakage was estimated on a store-by-store basis by evaluating the location of each participating store in relation to the sponsor utilities’ service areas. It was estimated that less than 4% of the total program bulb sales were made to non-Entergy customers.

The free-ridership ratio is the fraction of participants that purchased discounted bulbs that would have purchased CFLs or LEDs even without the program discount. The Net-to-Gross (“NTG”) factor for free-ridership is calculated as one minus the free-ridership ratio. Frontier Associates estimated the NTG value in two ways using data collected from a random survey to Texas residents conducted in late 2008.

First, a so-called “self-report” free-ridership ratio was determined from the answers to a question that asked CFL and/or LED purchasers if they would have bought the bulbs that they bought if the price had been \$1, \$2, or \$3 higher per bulb. The program average bulb incentive was between \$1 and \$2 per bulb and as much as \$10 on LED bulbs, so those respondents that indicated that they

would have paid \$2 or \$3 for CFL's and over \$10 for LED bulbs were considered free-riders. This method yielded a free-ridership ratio of 0.35 and a corresponding NTG of 0.65.

The second method used to estimate the free-ridership ratio was a statistical model referred to as a nested logic model. The model uses detailed survey results in an attempt to isolate the effects of the program on a respondent's decision to participate in the program. The NTG determined by this method was in the range of 0.7-0.8.

While Substantive Rule 25.181 does not require that reported savings be adjusted for free-ridership, Entergy felt that the unique program design and current market characteristics surrounding this program warranted special treatment. Given the uncertainties in determining free-ridership and the limited data available, the sponsor utilities chose to adopt a conservative estimate for the NTG of about 0.63 for reporting purposes. (This is an average value. Specifically, an NTG of 0.6 was used for the impacts of common wattage twist CFLs, while a value of 0.85 was used for specialty bulbs, such as high wattage twist bulbs and bulbs of other shapes.) The same NTG values used to report the program's net impacts for 2010 were used for 2009. These values are based on a comprehensive evaluation performed for the California Public Utilities Commission's update to the Database for Energy Efficient Resources ("DEER").

## **2010 Annual Summary Report - Solar PV Pilot MTP**

Entergy's Solar PV Pilot MTP was a two-year market transformation initiative that offered customers financial incentives for installations of solar PV systems interconnected on the customer's side of the electric service meter. The program started in 2009 and was a part of Entergy's energy efficiency program offerings in both 2009 and 2010. Incentives offered through the program were provided as rebates to customers to reduce the upfront costs of installing solar photovoltaic panels. High initial costs have been identified as a primary barrier to customer acceptance of solar technologies. The utility incentive could be utilized by customers together with any available federal tax credit. In addition to demand and energy savings achieved from the installations, the program aimed to transform the market by increasing the number of qualified companies offering installation services in the utility's service area and by decreasing the average installed cost of systems by creating economies of scale.

The Solar PV Pilot Program had a final program budget of \$452,025 in 2010. Incentive funds were tracked by customer class but no specific allocations were made among customer classes because of the limited funding available. Figure 1 summarizes the program budget and actual costs for 2010 and places those costs within the context of the program's history.

## 1. 2010 Results Summary

The Solar PV Pilot MTP saw a significant increase in demand in 2010, with the majority of program activity in the residential sector. The program's success is demonstrated by the following:

- Entergy's 2010 program funds had been fully expended on projects and an additional \$30,000 in projects was allocated to the program. This represented a significant increase in the utilization of budgeted funds compared to 2009;
- the program closed to new applicants on July 16, 2010 due to high demand;
- the program surpassed its 2010 goal for energy savings; and
- Entergy is continuing the program as a full MTP in 2011.

Figure 2 summarizes the status of incentive funding as of the end of 2010.

**Figure 2: Incentive Budget Summary for the Entergy Solar PV Program**

<b>Incentives</b>	<b>\$</b>
Funds Request in 2010	\$484,025
Funds Committed in 2010	\$452,025
Funds Completed/Paid in 2010	\$452,025

## 2. 2010 Project Completions

All program funds were fully utilized in 2010. Figure 3 shows detailed information on completed projects including total kW and kWh savings, total cost, and total incentives paid. It also contains program performance metrics such as average incentive \$/watt and average installed cost/watt.

**Figure 3: Project Completions, Savings, and Performance Metrics in the 2010 Entergy Solar PV Pilot Program**

<b>Completions</b>	<b>Residential</b>	<b>Non-residential</b>	<b>Total</b>
Number of Installations	24	4	28
Capacity Installed (kW-DC)	169.09	14.63	183.72
Total Installed Cost (\$)	\$932,250.32	\$98,657.39	\$1,030,907.71
Incentives Provided (\$)	\$415,450.00	\$36,575.00	\$452,025.00
<b>Performance Metrics</b>			
Avg. Incentive \$/watt	\$2.46	\$2.50	\$2.46
Avg. Installed cost \$/watt	\$5.51	\$6.74	\$5.61
<b>Savings</b>			
kW Savings	140.341	12.341	152.483
kWh Savings	270,536	23,408	293,944

Savings are calculated based on the deemed savings methodology for solar PV systems utilized in utility standard offer programs.

### 3. Other Program Results

In addition to the demand and energy savings achieved, the program created positive market transformation effects, including the mobilization of companies in local areas and across the state to promote and install solar electric systems in underserved rural markets. By the end of 2010, 70 companies had registered with the program to serve the Entergy service territory, including 26 companies with employees certified by the North American Board of Certified Energy Practitioners (“NABCEP”). Approximately nine of these service providers are located in or near Entergy’s service area.

**Figure 4: Service Providers in the 2010 Solar PV Pilot Program**

# of Installers	70
# of NABCEP Certified Installers	26

## X. Current Energy Efficiency Cost Recovery Factor (EECRF)

Entergy applied for its second Energy Efficiency Cost Recovery Factor (EECRF) rate schedule on May 1, 2010. The EECRF was approved for \$8,080,000 and Entergy began implementation of the rider on January 1, 2011.

### Revenue Collected

Entergy has billed out \$8,460,360 as of December 31, 2010 under the EECRF.

### Over- or Under-recovery

Entergy was approved to collect \$8,080,000 through the EECRF. Entergy collected \$8,460,360. Entergy overrecovered \$380,360.

## XI. Performance Bonus

In 2010, Entergy’s energy efficiency programs implemented under Substantive Rule 25.181 achieved demand reductions of 13.2 MW, which is 124.93% of its mandated goal calculated pursuant to 25.181(e), and annual energy savings of 28,629 MWh, which exceeded the mandated energy savings goal of 18,571 MWh. The present value of the avoided costs these savings will produce over the lives of the measures responsible for them is \$21,186,553. Given the \$7,031,967 costs of its 2010 energy efficiency programs, Entergy achieved \$14,155,186 in net benefits from its 2010 programs.

1% of the net benefits for every 2% that Entergy exceeded its goal is \$1,764,604, which is well above the bonus maximum of 20% of their program costs, \$1,406,273. Thus, Entergy's performance bonus for 2010 is \$1,406,273. See Appendix D for more detailed performance bonus calculations.

## ACRONYMS

<b>C&amp;I</b>	Commercial and Industrial
<b>CCET</b>	Center for the Commercialization of Electric Technologies
<b>CFL</b>	Compact Fluorescent Lamp
<b>DR</b>	Demand Response
<b>DSM</b>	Demand Side Management
<b>EEP</b>	Energy Efficiency Plan, which was filed as a separate document prior to April 2008
<b>EEPR</b>	Energy Efficiency Plan and Report
<b>EER</b>	Energy Efficiency Report, which was filed as a separate document prior to April 2008
<b>EE Rule</b>	Energy Efficiency Rule, PUCT Substantive Rules § 25.181 and § 25.183
<b>ERCOT</b>	Electric Reliability Council of Texas
<b>HTR</b>	Hard-To-Reach
<b>M&amp;V</b>	Measurement and Verification
<b>MTP</b>	Market Transformation Program
<b>PUCT</b>	Public Utility Commission of Texas
<b>REP</b>	Retail Electrical Provider
<b>RES</b>	Residential
<b>SCORE</b>	Schools Conserving Resources
<b>SOP</b>	Standard Offer Program

## GLOSSARY

**Capacity Factor** – The ratio of the annual energy savings goal, in kWh, to the peak demand goal for the year, measured in kW, multiplied by the number of hours in the year; or the ratio of the actual annual energy savings, in kWh, to the actual peak demand reduction for the year, measured in kW, multiplied by the number of hours in the year.

**Commercial customer** -- A non-residential customer taking service at a metered point of delivery at a distribution voltage under an electric utility's tariff during the prior calendar year and a non-profit customer or government entity, including an educational institution. For purposes of this EEPR, each metered point of delivery shall be considered a separate customer.

**Deemed savings** -- A pre-determined, validated estimate of energy and peak demand savings attributable to an energy efficiency measure in a particular type of application that an electric utility may use instead of energy and peak demand savings determined through measurement and verification activities.

**Demand** -- The rate at which electric energy is used at a given instant, or averaged over a designated period, usually expressed in kilowatts (kW) or megawatts (MW).

**Demand savings** -- A quantifiable reduction in demand.

**Energy efficiency** -- Improvements in the use of electricity that are achieved through facility or equipment improvements, devices, or processes that produce reductions in demand or energy consumption with the same or higher level of end-use service and that do not materially degrade existing levels of comfort, convenience, and productivity.

**Energy efficiency measures** -- Equipment, materials, and practices at a customer's site that result in a reduction in electric energy consumption, measured in kilowatt-hours (kWh), or peak demand, measured in kilowatts (kW), or both. These measures may include thermal energy storage and removal of an inefficient appliance so long as the customer need satisfied by the appliance is still met.

**Energy efficiency program** -- The aggregate of the energy efficiency activities carried out by an electric utility under this section or a set of energy efficiency projects carried out by an electric utility under the same name and operating rules.

**Energy Efficiency Rule (EE Rule)** -- § 25.181 and § 25.183, which are the sections of the Public Utility Commission of Texas' Substantive Rules implementing PURA § 39.905.

**Energy savings** -- A quantifiable reduction in a customer's consumption of energy that is attributable to energy efficiency measures.

**Growth in demand** -- The annual increase in demand in the Texas portion of an electric utility's service area at time of peak demand, as measured in accordance with Substantive Rule 25.181.

**Hard-to-reach (HTR) customers** -- Residential customers with an annual household income at or below 200% of the federal poverty guidelines.

**Incentive payment** -- Payment made by a utility to an energy efficiency service provider under an energy-efficiency program.



**Inspection** -- Examination of a project to verify that an energy efficiency measure has been installed, is capable of performing its intended function, and is producing an energy saving or demand reduction.

**Load control** -- Activities that place the operation of electricity-consuming equipment under the control or dispatch of an energy efficiency service provider, an independent system operator or other transmission organization, or that are controlled by the customer, with the objective of producing energy or demand savings.

**Load management** -- Load control activities that result in a reduction in peak demand on an electric utility system or a shifting of energy usage from a peak to an off-peak period or from high-price periods to lower price periods.

**Market transformation program (MTP)** -- Strategic programs to induce lasting structural or behavioral changes in the market that result in increased adoption of energy efficient technologies, services, and practices, as described in this EEPR.

**Measurement and verification (M&V)** -- Activities intended to determine the actual energy and demand savings resulting from energy efficiency projects as described in this section.

**Peak demand** -- Electrical demand at the times of highest annual demand on the utility's system.

**Peak demand reduction** -- Reduction in demand on the utility system throughout the utility system's peak period.

**Peak period** -- For the purpose of this section, the peak period consists of the hours from 1:00 p.m. to 7:00 p.m., during the months of June, July, August, and September, excluding weekends and Federal holidays.

**Projected Demand and Energy Savings** – Peak demand reduction and energy savings for the current and following calendar year that Entergy is planning and budgeting for in the EEPR. These Projected savings reflect Entergy’s calculated goals and Entergy’s continued commitment to provide emphasis on the needs of its low-income customers.

**Project sponsor** -- An energy efficiency service provider or customer who installs energy efficiency measures or performs other energy efficiency services under the Energy Efficiency Rule. An energy efficiency service provider may be a retail electric provider or commercial customer, provided that the commercial customer has a peak load equal to or greater than 50kW.

**Renewable demand side management (DSM) technologies** -- Equipment that uses a renewable energy resource (renewable resource), as defined in PUC Substantive Rule 25.173(c) (relating to Goal for Renewable Energy) that, when installed at a customer site, reduces the customer’s net purchases of energy, demand, or both.

**Standard offer program (SOP)** -- A program under which a utility administers standard offer contracts between the utility and energy efficiency service providers.

**APPENDICES**

## Appendix A: Reported Demand and Energy Reduction by County 2010

County Report	Energy Star MTP		Residential SOP		Hard-to-Reach SOP		Photovoltaic MTP	
	kW	kWh	kW	kWh	kW	kWh	kW	kWh
Brazos/Burleson	5.49	4,675	81.40	248,394	39.79	101,903		
Chambers	2.72	2,255	6.54	20,677				
Galveston	3.01	1,968	7.34	24,121				
Grimes	14.32	12,170	1.63	4,797	6.99	17,174	8.71	16,720
Hardin	72.08	41,770	49.14	150,099	10.57	29,317	17.30	31,056
Harris	61.88	53,989					3.65	7,040
Jasper			3.04	10,210				
Jefferson	90.72	39,266	822.67	2,077,145	620.66	1,514,184	17.22	31,744
Leon	1.32	1,082	25.80	59,992	7.70	12,025	8.02	15,456
Liberty	24.30	20,927	12.30	39,799	9.70	27,598		
Madison	4.28	3,596	20.81	41,101	68.92	156,531		
Milam	2.61	2,191						
Montgomery	1,579.90	1,239,333	898.24	2,135,088	372.45	1,054,777	49.95	84,368
Orange	23.88	26,328	46.99	140,851	35.46	103,009	30.58	59,520
Robertson	3.59	2,943			8.51	37,058		
San Jacinto	4.93	4,192	1.83	6,609				
Trinity			1.25	4,636			8.4	16,192
Tyler			16.16	42,593	16.98	37,276		
Walker	9.33	7,653	16.28	185,620	112.32	377,102	8.02	14,856
Washington					1.94	3,759		
	1,904.36	1,464,338	2,011.42	5,191,732	1,311.99	3,471,713	151.85	276,952

County Report	Commercial Sol MTP		SCORE/City Smart MTP		Load Management SOP		Premium Lighting MTP	
	kW	kWh	kW	kWh	kW	kWh	kW	kWh
Brazos/Burleson							0.26	2,538
Chambers			22.16	55,437			0.72	6,852
Galveston							0.69	6,916
Grimes	22.40	95,660	84.56	267,741			0.72	4,234
Hardin			18.52	73,790.00			4.69	11,906
Harris							11.45	148,233
Jasper								
Jefferson	957.60	3,969,878	1,519.78	3,597,052	2,117		178.24	1,853,658
Leon							8.08	22,562
Liberty			49.38	113,733				
Madison							1.08	10,256
Milam			17.78	44,755			0.91	8,853
Montgomery	550.54	2,744,728	849.75	1,992,054	284		202.24	2,126,789
Orange			181.01	390,647			22.60	237,895
Robertson								
San Jacinto							0.12	2,285
Trinity			137.25	331,815			0.09	1,254
Tyler			71.88	181,084.00			0.55	6,242
Walker	70.28	290,457	83.40	201,209	335		6.08	60,738
Washington								
	1,600.82	7,100,723	3,035.47	7,249,317	2,736.00	0	438.52	4,511,211

## Underutilized Counties

Entergy serves parts of 26 counties, but not all are served at the retail level. Several parts are served at the wholesale level to either a municipality or to a cooperative. In addition, Entergy may only serve a small portion of a county. Many smaller counties, by way of population, when divided by several utilities, municipalities, or cooperatives, make the promotion of energy efficiency program not cost effective under current rules. Some of the counties that fall in this category are: Burleson, Falls, Jasper, Leon, Limestone, Milam, Polk, and Waller. However, there are a few counties that need some additional attention paid. The only negative for them is their proximity to where the Project Sponsors are located. These counties are:

- Madison
- Robertson

For 2010, additional emphasis will be placed on attracting customers from these counties by working with Project Sponsors to promote the energy efficiency programs in these areas by other than current promotional practices or by rewarding Project Sponsors who work in these areas by paying more for installed measures.

## **Appendix B: Program Templates**

## **Appendix C: Existing Contracts and Obligations**

---

## Appendix D: Optional Support Documentation

### Performance Bonus Calculation Details

<b>Energy Efficiency Performance Bonus Calculator</b>		
	kW	kWh
<b>2010 Goals</b>	10,600	18,571,200
<b>2010 Savings</b>		
<i>Reported/Verified Total (including HTR)</i>	13,242	28,629,452
<i>Reported/Verified Hard-to-Reach</i>	1312	
<b>2010 Program Costs</b>	7,031,967	
<b>2010 Performance Bonus</b>	\$1,406,273	



**Bonus Calculation**

<b>124.93%</b>	Percentage of Demand Reduction Goal Met (Reported kW/Goal kW)
<b>154.16%</b>	Percentage of Energy Reduction Goal Met (Reported kWh/Goal kWh)
TRUE	Met Requirements for Performance Bonus?
\$21,186,553	Total Avoided Cost (Reported kW * PV(Avoided Capacity Cost) + Reported kWh * PV(Avoided Energy Cost), except for measures measure life other than 10 years for which PV(Avoided Capacity Cost) and PV(Avoided Energy Cost) are calculated using the specific measure lives)
\$7,031,367	Total Program Costs
\$14,155,186	Net Benefits (Total Avoided Cost - Total Expenses)
<b>Bonus</b>	
\$1,764,604	Calculated Bonus (((Achieved Demand Reduction/Demand Goal - 100%) / 2) * Net Benefits)
\$1,406,273	Maximum Bonus Allowed (20% of Program Costs)
<b>\$1,406,273</b>	<i>Bonus (Minimum of Calculated Bonus and Bonus Limit)</i>



**Texas School and Local Government Energy Efficiency Market  
Assessment and Baseline Study**

**Final Report**

*Prepared for:*

**CLEARResult Consulting Inc.**

*Prepared by:*

**OPINION DYNAMICS CORPORATION**  
1999 Harrison St. Ste 650  
Oakland, CA 94612  
[www.opiniondynamics.com](http://www.opiniondynamics.com)

Contact: Jennifer Mitchell-Jackson, Vice President  
February 2010

## **Executive Summary**

This report documents the results of Opinion Dynamics Corporation’s Market Assessment and Baseline Study of the School and Local Government Markets. This research was conducted for CLEAResult Consulting, Inc., and eight utilities—Oncor Electric Delivery, American Electric Power (AEP) Texas Central, AEP Texas North, AEP Southwestern Electric Power Company (SWEPCO), El Paso Electric Company, CenterPoint Energy, Texas New Mexico Power (TNMP), and Entergy Texas — to assist with the implementation and evaluation of the Educational Facilities Market Transformation Program and Government Facilities Market Transformation Program in Oncor territory and the SCORE<sup>SM</sup> and CitySmart<sup>SM</sup> Market Transformation Programs in the remaining utility territories. The primary objective of this study was to document the current status of school and local government energy density, key equipment, practices, and management within the aforementioned utility service territories (i.e., document baseline levels). Notably, baseline energy density data complements this study by providing actual energy usage numbers in addition to energy management characteristics. The energy density for the market can be calculated again in future studies and compared with the baseline as an indicator of program effectiveness.

This study incorporated a combination of:

1. Review and analysis of existing information for schools and cities (i.e., existing info on building characteristics, energy usage, and energy density) and
2. Original market research with schools and local governments.

Specifically, Opinion Dynamics conducted telephone interviews with a statistically significant sample 253 K-12 school districts, colleges, and local governments out of a population of 2,051. These included representatives of 107 K-12 schools (primarily public school districts), 15 representatives of colleges and universities, and 131 representatives from local governments, (i.e. counties or cities). In total, the results of this study represent 12% of the total market.

### **Market Assessment Findings**

Over 80% of the market is at least somewhat interested in finding ways to save energy. However, the market faces many barriers to energy efficiency adoption, including its own processes and infrastructure for energy decision making. As such, there are many opportunities to help local governments and schools overcome obstacles to adopting energy efficient improvements through

techniques such as market education, goal-setting, staffing, bill monitoring strategies, project guidelines and specifications, and monetary incentives.

For both schools and local governments (81% and 80% respectively), the most commonly stated obstacle to energy improvements is the cost of upgrading to energy efficient technology. However, over 90% of respondents indicated at least one additional non-cost barrier, with the top two being “the budget and procurement process for planning energy improvements” and “finding the time to identify, plan and execute energy improvements.” Specific findings regarding barriers include:

- Only 39% of schools and 27% of local governments note that they completely understand long-term energy efficiency benefits.
- Only one-third (33%) of local governments have staff with skills to identify energy improvements. Schools are better prepared, as nearly two-thirds (65%) have such staff.
- Awareness and familiarity with energy efficient technology options are often barriers in this marketplace. Less than half of schools are very familiar with T-5s, LED indoor, and LED outdoor lighting. Furthermore, less than 30% of the local governments are very familiar with T-8s, T-5s, and LED lighting.
- Setting financial metrics for energy measures is also critical for decision making, yet 72% of schools and 75% of local governments do not have payback requirements to reference for decision-making.
- While it may appear that most schools and local governments are monitoring their energy bills, the method and rigor under which they do so shows opportunity for vast improvement. Overall, most local governments (61%) and schools (48%) informally monitor their bills by simply looking at the bill each month without any sophisticated analytical software that looks for trends over time or signals them when an irregularity occurs.

The market welcomes resources and information to overcome its obstacles to improving energy efficiency:

- More than 80% of the market stated that “add-alternates”, contractor recommendations, and a written set of guidelines and specifications would help them to make energy decisions.<sup>11</sup>
- 83% of non-partner schools and 73% of non-partner local governments are interested in some type of program to help with energy improvements.
- Nearly two-thirds of respondents for schools and half of local governments noted that obstacles related to financing and budgeting could be overcome through support in finding financial resources such as grants, incentives, rebate programs, money, lowered costs, or cheaper prices. Respondents were also interested in finding out where they can access funding.
- Many respondents cited a need for cost analyses of energy efficient projects and products, which include opportunity cost, payback period, return on investment, and pricing information. One respondent noted the need for “some kind of tool whereby we could compare what we do now with other options, especially a tool that could compare return on investment.” Another noted that, “the biggest obstacle is making the calculations correct, being able to show the savings, [and] the payback that would be involved.”

### **Local Government Energy Baseline Findings**

Local governments own and operate a wide variety of building types, and building characteristics within each local government vary greatly. As such, it is clear that energy management plans and baseline data need to be specific to the buildings that participate in any future program. This variability is demonstrated in some of the key characteristics of buildings, such as:

- The number of occupants per city or county building ranges from an average of 8 in warehouses up to an average of 984 in airports (overall average: 86 occupants).
- The weekly operating hours per city or county building range from an average of 44 hours in courthouses up to an average of 138 hours in water treatment plants and 147 in airports (overall average: 93 hours).
- The number of computers ranges from 3 on average in warehouses up to 114 in city halls (overall average: 28 per city or county building).

There is also a great variation in energy usage and cost:

- The average annual electricity consumption per local government building ranges from 58,384 kWh per year at maintenance shops to 3,079,796 at airports (overall average: 539,612 kWh per year).

There are also clear opportunities for efficiency upgrades in key areas such as lighting, HVAC systems, and operation and management. Our findings show that:

- Only half of local government respondents have adopted any type of efficient indoor lighting. The most common type is the use of CFLs (44%). In terms of fluorescent lighting, only 12% have T5s, and 22% have T8s. Although local governments say they have this type of lighting, they only have them in a few fixtures and there are many fixtures that can

---

<sup>11</sup> An “add-alternate” in a request for proposals or bid document can obtain cost information an alternative that provides better energy performance.

still be upgraded. The standard T8 lamp will represent baseline technology with the manufacturing ban on T12 magnetic ballasts going into effect this summer.

- Overall, 34% of local government cooling units are more than ten years old.
- Only half of local governments have regular operations and maintenance procedures for energy using equipment in all of their buildings. In fact, 27% of respondents have no regular maintenance procedures at all. The most common procedures are regular and preventative maintenance for HVAC systems.

Other baseline data and opportunities for increasing efficiency are described in the report.

### **School Energy Baseline Findings**

K-12 school districts and colleges also differ greatly in terms of building use types. School districts typically include classrooms, gyms, libraries, cafeterias, and offices. Colleges contain a wider variety of building types, with the most common being classrooms (100%), offices (87%), and gyms (87%), but also include social meeting spaces and dormitories.

Energy usage data show that high schools and combined schools (any school with a combination of grades such as all K-12 or K-8) use the most electricity and natural gas in comparison to middle schools and elementary schools. These school types are also the largest in terms of square footage and the number of students.

Energy usage data also show that dormitories, gyms, and social meeting spaces on college campuses use the most electricity and natural gas in comparison to other building types. These building types also tend to have greater operating hours, square footage, and occupants.

Specific findings for schools include:

- Three-quarters of the school market has adopted some type of efficient indoor lighting. The most common type is the use of T8s (78%) followed by CFLs (70%). Only 48% have T5s. Although many schools say they have T8s and T5s, most only have them in a few fixtures and there are many fixtures that can still be upgraded. Again, the standard T8 lamp will represent baseline technology with the manufacturing ban on T12 magnetic ballasts going into effect this summer.
  - The penetration rate of LED indoor lighting is 22% for K-12 schools and 27% for colleges<sup>12</sup>; the penetration rate of LED exit signs is 67% for K-12 schools and 87% for colleges; and the penetration rate of LED outdoor lighting is 19% for K-12 schools and 27% for colleges.
- Overall, one-third of K-12 and college cooling units are more than ten years old.

---

<sup>12</sup> Note that while CLEAResult has identified some school districts or local governments that have tested indoor LED, non-exit sign lighting applications, CLEAResult has not seen interior LED lighting installations in any school or city facility. School and city program partners have cited the technology as being too cost-prohibitive. The survey question for respondents was, “Do you have any of the following types of lighting in your buildings...LED indoor lighting?” This question was asked of all respondents who said they were very or somewhat familiar with LED indoor lighting, and this followed the same question regarding LED exit sign lighting.

- More than eight in ten schools have regular operations and maintenance procedures for energy using equipment in all of their buildings. The most common procedures are regular and preventative maintenance for HVAC systems.

Other baseline data and opportunities for increasing efficiency in schools are described in the report.